

Claims

1. A wind turbine adapted to generate electricity using wind power or tidal power, comprising:

5 rotation shaft means for supporting a rotating structure to transmit wind power to a generator, and a plurality of blades secured to the rotation shaft means to be spaced apart one from another in a circumferential direction;

wherein each blade has a lattice composed of transverse lattice elements and longitudinal lattice elements which are plaited to cooperatively define a plurality of spaces; and

10 wherein, in each space, a rotation adjustment piece is coupled to a first portion of a transverse or longitudinal lattice element by a hinge to be capable of rotating between a closing position where it closes the space and an opening position where it opens the space, and a stopper projection is formed on a second portion of an opposite transverse or longitudinal lattice element to limit rotation 15 of the rotation adjustment piece to a predetermined angle, so that the blades as a whole can be rotated irrespective of a wind direction;

20 whereby, when the rotation adjustment piece is engaged with the stopper projection, the rotation adjustment piece reaches the closing position and is held on the same plane as its corresponding blade, so that electricity can be generated using wind force applied to the rotation shaft means through rotation adjustment pieces.

25 2. The wind turbine as set forth in claim 1, wherein the rotation shaft means comprises a rotation shaft which is arranged between upper and lower circular plates, and a rotation cylinder which is placed around and rigidly connected to the rotation shaft.

3. A wind turbine adapted to generate electricity using wind power or tidal power, comprising:

rotation shaft means for supporting a rotating structure to transmit wind power to a generator, and a plurality of blades secured to the rotation shaft means to be spaced apart one from another in a circumferential direction;

5 wherein each blade has a lattice composed of transverse lattice elements and longitudinal lattice elements which are plaited to cooperatively define a plurality of spaces; and

10 wherein, in each blade, each of several rotation adjustment pieces is coupled to a portion of a longitudinal lattice element to be capable of rotating between a closing position where it closes a predetermined number of the spaces and an opening position where it opens the predetermined number of the spaces, so that several rotation adjustment pieces can cover an entire surface of each blade and thereby the blades as a whole can be rotated irrespective of a wind direction;

15 whereby, depending upon a rotated position, the rotation adjustment pieces can open or close the spaces, so that electricity can be generated by using wind force applied to the rotation shaft means through the rotation adjustment pieces held in the closing position.